CLAIMS:

1. A low-pressure gas-discharge lamp equipped with a gas-tight discharge vessel that contains a gas filling, with electrodes for maintaining a gas discharge in the discharge vessel, at least one of which electrodes is arranged inside the discharge vessel and comprises a coil having a core made from a first refractory metallic material that has a first electronegativity, having a surrounding winding made from a second refractory metallic material that has a second electronegativity, having a coating of an electron-emitting material arranged between the core and the winding, and having current feeds, and with means for igniting and maintaining a gas discharge.

2. A low-pressure gas-discharge lamp as claimed in claim 1, characterized in that the core is composed of a first refractory material having a higher electronegativity and the surrounding winding of a second refractory material having a lower electronegativity.

3. A low-pressure gas-discharge lamp as claimed in claim 1, characterized in that core is composed of a first refractory material having a higher electronegativity that is selected from the group comprising tungsten and the alloys of tungsten alloyed with zirconium, hafnium, titanium, yttrium, scandium, lanthanum or the lanthanides, and the surrounding winding is composed of a second refractory material having a lower electronegativity that is selected from the group comprising zirconium, hafnium, titanium, yttrium, scandium, lanthanum or the lanthanides.

4. A low-pressure gas-discharge lamp as claimed in claim 1, characterized in that the core is composed of a first refractory material having a lower electronegativity and the surrounding winding of a second refractory material having a higher electronegativity.

5. A low-pressure gas-discharge lamp as claimed in claim 1, characterized in that the core is composed of a first refractory material having a lower electronegativity that is selected from the group comprising tungsten and the alloys of tungsten alloyed with zirconium, hafnium, titanium, yttrium, scandium, lanthanum or the lanthanides, and the

surrounding winding is composed of a second refractory material having a higher electronegativity that is selected from the group comprising rhenium, cobalt, nickel, ruthenium, palladium, rhodium, iridium, osmium and platinum.

6. A low-pressure gas-discharge lamp as claimed in claim 1, characterized in that the coating of an electron-emitting material contains a polymeric multiple barium tungstate.

7. An electrode, comprising a coil having a core made from a first refractory metallic material that has a first electronegativity, having a surrounding winding made from a second refractory metallic material that has a second electronegativity, having a coating of an electron-emitting material arranged between the core and the winding, and having current feeds.